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Spin-Lattice relaxation in CaB₆

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We report the results of 11 B-NMR measurements on CaB_6 . In an attempt to achieve a material with chemical composition close to stoichiometric CaB_6 , a slight excess of Ca was used in the sample preparation. The physical properties of CaB_6 reveal a semiconducting behavior with no indication of ferromagnetic order. We find that for CaB_6 the variation of T_1^{-1} with temperature is similar to $T_1^{-1}(T)$ of $Ca_{0.995}La_{0.005}B_6$ and SrB_6 , but the magnitude of the relaxation rate of the former is one order of magnitude larger. This observation is interpreted as an indication that CaB_6 still contains a non-negligible amount of self-doping, but the corresponding magnetic moments do not order spontaneously.